Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) A marker, comprising:

a first resonant circuit comprising a first planarized coil having a pair of terminals and a capacitor connected to said pair of terminals, said first resonant circuit to generate a first resonant signal in response to an interrogation signal; and

a second resonant circuit comprising a second planarized coil having a pair of terminals and a non-linear capacitor connected to said pair of terminals, with a portion of said second planarized coil to overlap a portion of said first planarized coil, said second resonant circuit to receive said first resonant signal and generate a second resonant signal having a second resonant frequency.

2. (Original) The marker of claim 1, wherein an amount of overlap corresponds to an amount of mutual coupling k between fields generated by said coils.

3. (Original) The marker of claim 2, wherein a value for k comprises approximately 0.3.

4. (Original) The marker of claim 1, wherein said non-linear capacitor comprises one of a zener diode, a varactor, and metal-oxide semiconductor capacitor.

5. (Original) The marker of claim 1, wherein said non-linear capacitor operates as a voltage dependent variable capacitor.

6. (Original) The marker of claim 1, wherein said second resonant frequency is less than said first resonant frequency.

7. (Original) The marker of claim 1, wherein said second resonant frequency is approximately half of said first resonant frequency.

8. (Original) The marker of claim 1, wherein said interrogation signal operates at approximately 13.56 Megahertz.

9. (Original) The marker of claim 1, wherein said first resonant frequency comprises approximately 13.56 Megahertz, and said second resonant frequency comprises approximately 6.78 Megahertz.

10. (Original) A marker, comprising:

a first resonant circuit comprising a first planarized coil having a pair of terminals and a capacitor connected to said pair of terminals, said first resonant circuit to generate a first resonant signal in response to an interrogation signal; and

a second resonant circuit comprising a second planarized coil having a pair of terminals and a non-linear capacitor connected to said pair of terminals, with said second

resonant circuit positioned within said first planarized coil, said second resonant circuit to receive said first resonant signal and generate a second resonant signal having a second resonant frequency.

11. (Original) The marker of claim 10, wherein said coils are positioned to have an amount of mutual coupling *k* between fields generated by said coils.

12. (Original) The marker of claim 11, wherein a value for *k* comprises approximately 0.3.

13. (Original) The marker of claim 10, wherein said non-linear capacitor comprises one of a zener diode, a varactor, and metal-oxide semiconductor capacitor.

14. (Original) The marker of claim 10, wherein said non-linear capacitor operates as a voltage dependent variable capacitor.

15. (Original) The marker of claim 10, wherein said second resonant frequency is less than said first resonant frequency.

16. (Original) The marker of claim 10, wherein said second resonant frequency is approximately half of said first resonant frequency.

17. (Original) The marker of claim 10, wherein said interrogation signal operates at

approximately 13.56 Megahertz.

18. (Original) The marker of claim 10, wherein said first resonant frequency comprises approximately 13.56 Megahertz, and said second resonant frequency comprises approximately 6.78 Megahertz.

19. (Currently Amended) A system, comprising: a transmitter to transmit an interrogation signal operating at a first frequency;

a security tag having a frequency-dividing marker comprising a pair of overlapping resonant circuits, with a first resonant circuit to generate a first resonant signal in response to said interrogation signal, and a second resonant circuit to receive said first resonant signal and generate a second resonant signal having a second resonant frequency in response to said first resonant signal; [[and]]

a detector to detect said second resonant signal from said marker and generate a detection signal in accordance with said second resonant signal;

wherein the first resonant circuit includes a first inductor comprising a first planarized coil having a pair of terminals; and

wherein the second resonant circuit includes a second inductor comprising a second planarized coil having a pair of terminals.

20. (Currently Amended) The system of claim 19, wherein said first resonant circuit comprises:

~~a first inductor comprising a first planarized coil having a pair of terminals; and~~

a capacitor connected to said pair of terminals of the first planarized coil.

21. (Currently Amended) The system of claim 20, wherein said second resonant circuit comprises:

~~a second inductor comprising a second planarized coil having a pair of terminals;~~ ~~and~~

a non-linear capacitor connected to said pair of terminals of the second planarized coil.

22. (Original) The system of claim 21, wherein said second planarized coil overlaps said first planarized coil to create a mutual coupling *k* between fields generated by said coils.

23. (Original) The system of claim 22, wherein a value for *k* comprises approximately 0.3.

24. (Original) The system of claim 21, wherein said second resonant circuit is positioned within said first planarized coil to create a mutual coupling k between fields generated by said coils.

25. (Original) The system of claim 24, wherein a value for k comprises approximately 0.3.

26. (Original) The system of claim 19, wherein said interrogation signal operates at

approximately 13.56 Megahertz.

27. (Original) The system of claim 19, wherein said first resonant frequency comprises approximately 13.56 Megahertz, and said second resonant frequency comprises approximately 6.78 Megahertz.

28. (Previously Presented) The system of claim 19, further comprising an alarm system to connect to said detector, said alarm system to receive said detection signal and generate an alarm signal in response to said detection signal.

29. (Currently Amended) A method, comprising:

receiving an interrogation signal at a first resonant circuit for a marker, the first resonant circuit including a first planarized coil;

generating a first resonant signal having a first resonant frequency in response to the interrogation signal;

receiving said first resonant signal at a second resonant circuit overlapping said first resonant circuit, the second resonant circuit including a second planarized coil; and

generating a second resonant signal having a second resonant frequency in response to said first resonant signal, with said second resonant frequency being different from said first resonant frequency.

30. (Original) The method of claim 29, wherein said second resonant frequency is less than said first resonant frequency.

31. (Original) The method of claim 29, wherein said second resonant frequency is approximately half of said first resonant frequency.

32. (Original) The method of claim 29, wherein said interrogation signal operates at approximately 13.56 Megahertz.

33. (Original) The method of claim 29, wherein said first resonant frequency comprises approximately 13.56 Megahertz, and said second resonant frequency comprises approximately 6.78 Megahertz.

34. (Original) A marker, comprising:

a resonant circuit comprising a planarized coil having a pair of terminals and a non-linear capacitor connected to said pair of terminals, said resonant circuit to receive an interrogation signal operating at 13.56 MHz and generate a resonant signal in response to said interrogation signal.

35. (Original) The marker of claim 34, wherein said non-linear capacitor comprises one of a zener diode, a varactor, and metal-oxide semiconductor capacitor.

36. (Original) The marker of claim 34, wherein said non-linear capacitor operates as a voltage dependent variable capacitor.